WE CLAIM:

A compound comprising the formula: 1.

ng the formula:
$$G = \begin{bmatrix} R_1 \\ C \\ R_2 \end{bmatrix}_a [M_1]_b = \begin{bmatrix} Y_1 \\ C \\ - \end{bmatrix}_c N \begin{bmatrix} E_4 \\ - \end{bmatrix}$$

wherein: 5

$$J \text{ is } - \overset{E_1}{\overset{}{\underset{}_{}}{\overset{}{\text{-}}}} - E_2} \text{ , } - \overset{\left[\overset{R_3}{\overset{}{\overset{}{\text{-}}}}\right]}{\overset{}{\overset{}{\text{-}}}} - \left[\overset{M_2}{\overset{}{\text{-}}}\right]_{e_1}} - \overset{\left[\overset{N_2}{\overset{}{\text{-}}}\right]}{\overset{}{\text{-}}} - \left[\overset{N_3}{\overset{}{\text{-}}}\right]_{e_1}} - \overset{\left[\overset{R_7}{\overset{}{\text{-}}}\right]}{\overset{}{\text{-}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}}\right]}{\overset{}{\text{-}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}}\right]}{\overset{}{\text{-}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}}\right]}{\overset{}{\text{-}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}}\right]}{\overset{}{\text{-}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}\right]}{\overset{\left[\overset{N_3}{\overset{}{\text{-}}}\overset{}{\text{-}}\overset{}{\text{-}}} - \overset{\left[\overset{N_3}{\overset{}{\text{-}}}\overset{}{\text{-}}\overset{}{\text{-}}\overset{}{\text{-}}\overset{}{\text{-}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}\overset{}{\text{-}}\overset{}{\text{-}}}\overset{}{\text{-}}\overset{}{\text{-}}\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}\overset{}{\text{-}}}\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}\overset{}{\text{-}}\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}\overset{}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}}} - \overset{N_3}{\overset{-}}} - \overset{\left[\overset{N_3}{\overset{}}{\text{-}}}} - \overset{N_3}{\overset{-}}} - \overset{N_3}{\overset{N_3}}} - \overset{N$$

or
$$= \begin{bmatrix} \frac{R_3}{C} \\ \frac{R_4}{d_2} \end{bmatrix}_{d2} \begin{bmatrix} \frac{Y_1^2}{C} \\ \frac{R_5}{C} \end{bmatrix}_{f2} \begin{bmatrix} \frac{R_5}{C} \\ \frac{R_6}{R_6} \end{bmatrix}_{g2} \begin{bmatrix} \frac{R_7}{C} \\ \frac{R_8}{R_8} \end{bmatrix}_{i2} \begin{bmatrix} \frac{R_9}{C} \\ \frac{R_{10}}{R_{10}} \end{bmatrix}_{i2} \begin{bmatrix} \frac{Y_1^3}{C} \\ \frac{R_{10}}{R_{10}} \end{bmatrix}_{i2}$$

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E₁₋₄ are independently selected from the group consisting of hydrogen, $C_{\text{1-6}}$ alkyls, $C_{\text{3-12}}$ branched alkyls, $C_{\text{3-8}}$ cycloalkyls, $C_{\text{1-6}}$ substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxy, phenoxy, C_{1-6} heteroalkoxy,

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$$- \begin{bmatrix} R_3 \\ C \\ R_4 \end{bmatrix}_{d1} \begin{bmatrix} M_2]_{e1} + \begin{bmatrix} Y_2 \\ C \\ R_6 \end{bmatrix}_{g1} \begin{bmatrix} R_5 \\ C \\ R_6 \end{bmatrix}_{g1} \begin{bmatrix} M_3]_{h1} + \begin{bmatrix} R_7 \\ C \\ R_8 \end{bmatrix}_{i1} \begin{bmatrix} R_9 \\ C \\ R_{10} \end{bmatrix}_{i1} \begin{bmatrix} R_9 \\ C \\ R_{10} \end{bmatrix}_{i1} \begin{bmatrix} M_5]_{m1} - C - B \end{bmatrix}$$

or
$$- \frac{\begin{bmatrix} R_3 \\ C \\ R_4 \end{bmatrix}_{d2}}{\begin{bmatrix} M_2 \end{bmatrix}_{e2}} + \frac{Y_2}{C} + \frac{R_5}{C} + \frac{R_5}{C} + \frac{R_5}{C} + \frac{R_7}{C} + \frac{R_8}{C} + \frac{R_9}{C} + \frac{R_9}{C} + \frac{R_9}{R_{10}} + \frac{R_9}{C} + \frac{R_9}{R_{10}} + \frac{R_9}{C} + \frac{R_9}{R_{10}} + \frac{R_9}$$

and at least one of E₁₋₄ includes a B moiety;

B is a leaving group, OH, a residue of a hydroxyl-containing moiety, a residue of an amine-containing moiety or

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wherein E5 is independently selected from the same group which defines

$$\begin{array}{c} J_1 \text{ is } \overset{\text{E_{1a}}}{-\text{$C^{-}E_{2a}$,}} \\ \overset{\text{E_{3a}}}{-\text{E_{3a}}} \end{array}$$

E_{1a-3a} are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, 30

 C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxy, phenoxy, C_{1-6} heteroalkoxy,

or
$$- \begin{bmatrix} R_{3b} \\ \dot{C} \\ \dot{R}_{4b} \end{bmatrix}_{d4} = \begin{bmatrix} Y_{2b} \\ \dot{C} \end{bmatrix}_{14} \begin{bmatrix} R_{5b} \\ \dot{C} \\ \dot{R}_{6b} \end{bmatrix}_{g4} = \begin{bmatrix} R_{7b} \\ \dot{C} \\ \dot{R}_{8b} \end{bmatrix}_{i4} = \begin{bmatrix} R_{9b} \\ \dot{C} \\ \dot{R}_{10b} \end{bmatrix}_{i4} = \begin{bmatrix} R_{9b} \\ \dot{R}_$$

wherein B_1 is a leaving group, OH, a residue of a hydroxyl-containing moiety or a residue of an amine-containing moiety or E_6 N

wherein E_6 is independently selected from the same group which defines E_{1-4} ;

$$J_2$$
 is $-\overset{\mathsf{E}_{1b}}{\overset{\mathsf{C}}{\mathsf{E}}_{2b}}$, $\overset{\mathsf{E}_{3b}}{\overset{\mathsf{E}_{3b}}{\mathsf{E}}_{3b}}$

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wherein E_{1b-3b} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxy, phenoxy, C_{1-6} heteroalkoxy,

wherein B₂ is a leaving group, OH, a residue of a hydroxyl-containing moiety or a residue of an amine-containing moiety;

G is a polymeric residue;

Y₁₋₃, Y_{2a-d} and Y_{3a-d} are each independently O, S or NR_{11a}

 M_{1-4} , M_{2a-2d} , M_{3a-3d} , and M_{4a-4d} are each independently O, S or NR_{11b} ; M_5 and M_{5a-d} are each independently X or Q,

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_3)$ or $C(=Y_{3a-d})$;

 $R_{1\text{--}10}$, $R_{1\text{a--}11\text{a}}$, $R_{1\text{b--}11\text{b}}$, $R_{1\text{c--}10\text{c}}$ and $R_{1\text{d--}10\text{d}}$ are each independently selected from the group consisting of hydrogen, $C_{1\text{--}6}$ alkyls, $C_{3\text{--}12}$ branched alkyls, $C_{3\text{--}8}$ cycloalkyls, $C_{1\text{--}6}$ substituted alkyls, $C_{3\text{--}8}$ substituted cycloalkyls, aryls, substituted aryls, aralkyls, $C_{1\text{--}6}$ heteroalkyls, substituted $C_{1\text{--}6}$ heteroalkyls, $C_{1\text{--}6}$ alkoxy, phenoxy and $C_{1\text{--}6}$ heteroalkoxy; and

a, b, c, d1-d6, e1-e6, f1-f6, g1-g6, h1-h6, i1-i6, j1-j6, k1-k6, l1-l6, m1-m6 are each independently zero or a positive integer.

2. The compound of claim 1, wherein G further comprises a capping group A, which is selected from the group consisting of hydrogen, CO₂H, C₁₋₆ alkyl moieties, and

$$(I') \qquad \qquad E_{4} \qquad \qquad (I')_{c} [M_{1}]_{b} \qquad \qquad \begin{bmatrix} R_{1} \\ C \\ R_{2} \end{bmatrix}_{a}$$

wherein a, b, c, R_{1-2} , M_1 , Y_1 , E_4 and J are the same as set forth in claim 1.

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3. A compound of claim 2, of the formula:

$$\begin{bmatrix} E_{4} \\ N - \begin{bmatrix} Y_{1} \\ C \end{bmatrix}_{c} [M_{1}]_{b} - \begin{bmatrix} R_{1} \\ C \end{bmatrix}_{a} G - \begin{bmatrix} R_{1} \\ C \end{bmatrix}_{c} [M_{1}]_{b} - \begin{bmatrix} Y_{1} \\ C \end{bmatrix}_{c} N \end{bmatrix}$$

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- 4. The compound of claim 1, where a, b, c, d1-d6, e1-e6, f1-f6, g1-g6, h1-h6, i1-i6, j1-j6, k1-k6, l1-l6, m1-m6 are independently zero, one or two.
- 5. The compound of claim 1, wherein R_1 and R_2 are both H, a and c are one, Y_1 is O and both E_1 and E_4 are H.
 - 6. The compound of claim 1, wherein G is polyalkylene oxide residue.
- 7. The compound of claim 6, wherein G is a polyethylene glycol residue.
 - 8. The compound of claim 1, wherein G is -O-(CH₂CH₂O)_x or -O-(CH(CH₃)CH₂O)_x.

wherein x is the degree of polymerization.

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- 9. The compound of claim 8, wherein G is $-O-(CH_2CH_2O)_x$ and x is a positive integer so that the weight average molecular weight is at least about 20,000.
- 10. The compound of claim 9, wherein G has a weight average molecular weight of from about 20,000 to about 100,000.
 - 11. The compound of claim 10, wherein G has a weight average molecular weight of from about 25,000 to about 60,000.

- 12. The compound of claim 1, wherein B is a residue of an amine containing moiety.
 - 13. The compound of claim 12, wherein said amine-containing moiety is

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wherein

 $R_{12\text{-}13}$ are independently selected from the group consisting of hydrogen, $C_{1\text{-}6}$ alkyls, $C_{3\text{-}12}$ branched alkyls, $C_{3\text{-}8}$ cycloalkyls, $C_{1\text{-}6}$ substituted alkyls, $C_{3\text{-}8}$ substituted cycloalkyls, aryls, halo, substituted aryls, aralkyls, $C_{1\text{-}6}$ heteroalkyls, substituted $C_{1\text{-}6}$ heteroalkyls;

 $R_{14.18}$ are independently selected from alkoxy, e.g. OR_{19} or, in the alternative, H, OH, N₃, NHR₂₀, NO₂ or CN, fluoro, chloro, bromo, iodo, where $R_{19.20}$ are independently selected from the same group which defines $R_{12.13}$.

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14. A compound of claim 3, selected from the group consisting of:

wherein Z is one of:

$$-NH - (CH_{2} - CH_{2} - O)_{2} CH_{2} - B , -NH - (CH_{2} - CH_{2} - O)_{2} CH_{2} - B$$

$$-NH - (CH_{2} - CH_{2} - O)_{2} CH_{2} - CH_{2} - NH - CH_{2} - CH_{2} - O)_{2} CH_{2} - CH_{2} - O$$

$$-NH - (CH_{2} - CH_{2} - O)_{2} CH_{2} - CH_{2} - NH - CH_{2} - O$$

$$-NH - (CH_{2} - CH_{2} - O)_{2} CH_{2} - CH_{2} - NH - CH_{2} - O$$

$$-NH - (CH_{2} - CH_{2} - O)_{2} CH_{2} - CH_{2} - O$$

$$-NH - (CH_{2} - CH_{2} - O)_{2} CH_{2} - CH_{2} - O$$

and
$$-NH - (CH_2 - CH_2 - O)_2 - CH_2 - CH_2 - NH - C - B$$
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15. A method of preparing a polymeric transport system, comprising

a) reacting compound of the formula:

$$B_{3}[M_{3}]_{h_{1}} = \begin{bmatrix} R_{7} \\ C \\ R_{8} \end{bmatrix}_{i_{1}} \begin{bmatrix} M_{4}]_{j_{1}} \\ R_{10} \end{bmatrix}_{l_{1}} \begin{bmatrix} R_{9} \\ C \\ R_{10} \end{bmatrix}_{l_{1}} \begin{bmatrix} M_{5}]_{m_{1}} \\ C \\ -B \end{bmatrix}$$

wherein

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B is a residue of a biologically active amine-containing moiety or a hydroxyl-containing moiety;

B₃ is a cleavable protecting group;

10 Y_3 is O, S, or NR_{11a} ;

M₃ and M₄ are independently O, S, or NR_{11b},

 M_5 is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_3)$;

15 R₇₋₁₀ and R_{11a-b} are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

hI-mI are each independently zero or a positive integer;

- b) cleaving the cleavable protecting group B₃; and
 - c) reacting the resultant compound with a compound of the formula

$$G = \begin{bmatrix} R_1 \\ C \\ R_2 \end{bmatrix} = \begin{bmatrix} M_1 \end{bmatrix}_b = \begin{bmatrix} Y_1 \\ C \\ \end{bmatrix}_c \begin{bmatrix} E'_4 \\ \end{bmatrix}_c$$

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wherein

E'₁₋₄ are independently selected from the group consisting of hydrogen,
 C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls,

 C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls, C_{1-6} alkoxy, phenoxy, C_{1-6} heteroalkoxy,

wherein

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B₄ is a leaving group;

G is a polymer residue;

 Y_{1-2} are independently O, S, or NR_{11a} ;

 M_{1-2} are independently O, S, or NR_{11b}

 R_{1-6} , R_9 and R_{10} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;

 a, b, c, d_1 - g_1 and d_2 - g_2 are each independently zero or a positive integer, whereby a polymeric conjugate is formed.

16. A method of preparing a polymeric transport system, comprising:
 reacting a biologically active moiety containing an unprotected amino or
 20 hydroxyl group with polymeric residue containing a terminal moiety of the formula:

wherein:

 Y_3 is O, S, or NR_{11a} ;

25 R₇₋₁₀ and NR_{11a} are independently selected from the group consisting of hydrogen, C₁₋₆ alkyls, C₃₋₁₂ branched alkyls, C₃₋₈ cycloalkyls, C₁₋₆ substituted alkyls, C₃₋₈ substituted cycloalkyls, aryls, substituted aryls, aralkyls, C₁₋₆ heteroalkyls and substituted C₁₋₆ heteroalkyls;

M_{4.5} are independently O, S, or NR_{11b}.

B₅ is a leaving group capable of reacting with an unprotected amino or

hydroxyl group of a biologically active moiety; and *i1-m1* are each independently zero or a positive integer, whereby a polymeric conjugate is formed.

- 5 17. A method of treatment, comprising: administering to a mammal in need of such treatment an effective amount of a compound of claim 1, wherein B is a residue of a biologically active moiety.
- 18. A method of treatment, comprising:

 10 administering to a mammal in need of such treatment an effective amount of a compound of claim 3, wherein B is a residue of a biologically active moiety.